REMARKS

By the present Amendment, claims 25 and 26 are added. Claims 1-7, 11-14, 17-20, and 23-26 are pending herein. Support for the amendments may be found, at least, in paragraph [0021] of the subject specification.

Claims 1-7, 11-14, 17-20, 23 and 24 stand rejected under 35 U.S.C. 103(a) over U.S. Patent No. 6,527,817 ("Fang et al.") in view of U.S. Patent Publication No. 2003/0198759 ("Fruge et al."). This rejection is respectfully traversed.

The Fang et al. documents describe polishing compositions that include a <u>blend</u> of fumed silica and colloidal silica. They do not disclose a <u>span value</u> for the abrasive. Moreover, Fang et al. only teaches a polishing dispersion with a particle size distribution defined by <u>number</u>. This will not necessarily result in the same particle size distribution defined by <u>volume</u>.

The definition of a particle size distribution by <u>number</u> can be significantly different than the definition of a particle size distribution by <u>volume</u>. For example, the particle distribution span by <u>number</u> may be significantly different than the particle distribution span value by <u>volume</u> since measurement by number does not take into account the volume of the particle. Thus, when defining particle size by <u>number</u> distribution or span value, if one very large particle is present, it will not significantly affect the distribution, whereas when defining a particle size distribution by <u>volume</u>, such a particle would significantly affect the distribution.

In addition, Fang et al. measure the properties of a <u>blend</u> of fumed silica and colloidal silica particles. Fang et al. does not disclose the properties of the colloidal silica. Thus, any description in Fang et al. about the particle size distribution of abrasive particles, including reference to sigma g, relates to the <u>blend</u> and not the colloidal silica particles.

Fruge et al. describes a colloidal silica that is used for digital media applications, such as ink jet recording sheets (see paragraph ([0001]). The colloidal silica is used to impart gloss to the sheets and to provide good ink adsorption. There is no mention in Fruge et al. that the colloidal particles described therein would be suitable for use in chemical mechanical planarization ("CMP") formulations.

The examiner bears the burden of establishing a *prima facie* case of obviousness, *In re Deuel*, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995), *In re Rijckaert, 9:* F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993); *In re Oetiker,* 977 F.2d 1443, 1445, 24 USPQ 2d 1443, 1444 (Fed. Cir. 1992). Only if this burden is met does the burden of coming forward with rebuttal argument or evidence shift to the applicant. *Rijckaert,* 9 F.3d at 1532, 28 USPQ2d at 1956. When the references cited by the examiner fail to establish a *prima facie* case of obviousness, the rejection is improper and will be overturned. *In re Fine,* 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

The combination of elements in a manner that reconstructs the applicant's invention only with the benefit of hindsight is insufficient to present a *prima facie* case of obviousness. There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination. That knowledge can not come from the applicant's invention itself. *Diversitech Corp v. Century Steps, Inc.,* 850 F.2d 675. 678-79, 7 USPQ2d 1315, 1318 (Fed. Cir. 1988); *In re Geiger,* 815 F.2d 686, 687, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987); *Interconnect Planning Corp. v. Feil,* 774 F.2d 1132, 1147, 227 USPQ 543,551 (Fed. Cir. 1985).

In instant case, Applicants submit that one of ordinary skill in the art would not have combined the colloidal silica described in Fruge et al. with the fumed silica described in Fang et al., since colloidal silica that provides acceptable gloss and ink adsorption in ink jet applications may not provide the desired abrasiveness that is suitable for CMP formulations. There would have been no motivation for the artisan to make such a combination.

Moreover, even if the artisan were to combine the teachings of Fruge et al. with the teachings of Fang et al., one would still not arrive at the present invention (i.e., the span value). Applicants submit the span value is a desirable feature that provides improved planarization in the formulation (see the Examples of the present application where small abrasive span values in CMP formulations provides inferior results).

Fang et al. describe a particle size distribution of a blend of fumed silica particles and colloidal silica particles. Fruge et al. does not rectify this teaching of Fang et al. since the artisan would still use a blend of particles that would not have the instant claimed particle size distribution. There is simply no teaching in Fang et al. (or Fruge et al.), or motivation for the artisan, to prepare a CMP formulation with colloidal silica having a particle size distribution and span value as recited in the present claims. Moreover, due to the significant differences in the

manufacture of colloidal and fumed silicas, the particle size distributions may vary considerably. Thus, it is unclear from Fang et al. as to the nature of the colloidal silica particle size distribution.

Therefore, Applicants submit that no *prima facie* case of obviousness has been set forth in the Office Action.

Accordingly, it is submitted that the subject matter of claims 1-7, 11-14 and 23-26 are not rendered obvious by the above-mentioned references. Applicants respectfully request withdrawal of this rejection.

In view of the above remarks, Applicants earnestly solicit the withdrawal of the rejections set forth in the April 26, 2010, Office Action and notification to that effect in the form of a Notice of Allowability.

Respectfully submitted,

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